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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,898	03/23/2004	Adrian P. Stephens	884.B94US1	2401
21186 7590 07/16/2007 SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			EXAMINER PEREZ, JULIO R	
			ART UNIT 2617	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/806,898	Applicant(s) STEPHENS, ADRIAN P.	
	Examiner Julio R. Perez	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-13 and 16-30 is/are rejected.
- 7) ☒ Claim(s) 9, 14, 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Regarding claims 7, 12, 18, 23, note the use of "802.11-type" (a type of protocol), protocols and standards change over time, hence, it is inappropriate to have the scope of a claim change with time. Because organizations implementing standards meet regularly and have the authority to modify standards, any connection a claim may have to these standards may vary scope over time. The other aspect arising from this is enablement. If the standard changes, the disclosure may no longer support the limitation. If the scope of the invention sought to be patented cannot be determined from the language of the claims, a second paragraph rejection is appropriate (In re Wiggings, 179 USPQ 421).

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 8-12, 19-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 8, 23 lack the proper preamble necessary for a statutory computer program product claim. See MEP 2100 for guidance on computer related inventions. The examiner suggests a preamble as follows: "A computer readable medium encoded with instructions capable of being executed by a computer for accessing information for performing:"

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 8, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okanou et al. (US007158769B2) in view of Kossi et al. (US006912204).

Regarding claims 1,8, Okanou discloses a number of channels, a center channel (Figure 2, # S2; col. 4, lines 62-67 – col. 5, lines 1-10 teach selection of center and adjacent channels); and selecting a group of contiguous communications channels including the number of channels, a center channel (col. 5, lines 1-10, 40-60, show the selection of adjacent to include center channel).

Okanoue does not explicitly disclose the control channel.

Kossi teaches a local channel selector for indicating a control channel among the channel configuration within a 802.16 IEEE standard (col. 2, lines 63-67 – col. 3, lines 1-5, 26-33).

It would have been obvious to one skilled in the art at the time of the invention to modify Okanou, such that to include a control channel, to provide the control channel for greater coverage of the band spectrum.

Regarding claim 11, the combination teaches selecting the group further includes at least a portion of the contiguous communications channels to include the center channel and the control channel (Figure 2, # S2; col. 4, lines 62-67 – col. 5, lines 1-10

teach selection of center and adjacent channels, and a center of the group of 21 channels).

6. Claims 3, 4, are rejected under 35 U.S.C. 103(a) as being unpatentable over Okanoué and Kossi in view of Van De Berg (5,907,812).

Regarding Claims 3, 4, the combination teaches claim 1, but is silent on wherein alternately selecting an additional channel not included in the portion on an opposite side of the center channel as the control channel, and on a same side of the center channel as the control channel, until the specified number of channels is selected.

Van De Berg teaches a transmission scheme where a sided numbered of channels C1-C25 are spread around the center frequency on the range R, on the opposite or same side of the center frequency, which read on the portion on an opposite side of the center channel as the control channel (Figure 5, col. 7, lines 28-55).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Banister, such that opposite or same side frequencies are chosen to correspond to center and control channels, to provide means to a better selectivity on the whole range of the frequency band.

7. Claims 5, 6, 10, 16, 17, 21, 25, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okanoué and Kossi in view of Kong et al. (US 20040192208A1).

Regarding claims 5, 6, 10, 16, 17, 21, 25, 30, the combination teaches claim 1, but is silent on wherein selecting the group further selecting the control channel to overlap a legacy channel.

Kong teaches a transmission scheme wherein legacy channel transmissions are processed and included with center and control channels (Figure 5A, par. 31, lines 12-17, par. 45, lines 13-15, par. 47).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Banister, such that legacy channels are covered in conjunction to the control channel to provide a greater coverage of the band spectrum.

8. Claims 7, 12, 18, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okanou and Kossi in view of Kim et al. (US 20030087645A1).

Regarding claims 7, 12, 18, 23, the combination teaches claims 1/8, but is silent on wherein selecting the group is selected according to an Institute of Electrical and Electronic Engineers 802.11 standard.

Kim teaches a transmission scheme wherein group of channels operate in accordance with the IEEE 802.11 standard (par. 31, lines 1-3, par. 32, line 1, par. 38, lines 15).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Banister, such the channel group is selected within the 802.11 standard to provide frequency planning mechanism that serves as a frequency planning of large-scale multi-cell IEEE 802.11 WLANs as well.

9. Claims 13, 19, 20, 22, 24, 26, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kossi in view Saunders et al (US 20040142696A1).

Regarding claims 13, 19, 24, Kossi teaches selecting a first group of contiguous communications channels using a specified control channel (col. 2, lines 63-67 – col. 3,

lines 1-5, 26-33, teach a selection of adjacent channels, but is silent on a signed extension channel offset.

Saunders teaches a transmission scheme wherein a numbered of channels are scanned o a burst containing a series of +/- ones frequencies (i.e., channels), which read on signed extension channels (pars. 32, 136).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Banister, such that offset of numbered channels being integrated into the system to provide a mechanism for selecting a wider range on the frequency band.

Regarding claim 20, the combination of Kossi and Saunders teaches a value of the signed extension channel offset is selected from an integer (Saunders, par. 136, +/- 1).

Regarding claim 22, the combination of Kossi and Saunders teaches a positive value of the signed extension channel offset refers to a frequency spectrum above a spectrum including the control channel, and wherein a negative value of the signed extension channel offset refers to a frequency spectrum below the spectrum including the control channel (Saunders, Figure 21, par. 136).

Regarding claim 26, the combination of Kossi and Saunders teaches a memory to couple to the channel selection module and to store an indication of the group (Saunders, pars. 136, 138-139).

Regarding claim 27, the combination of Kossi and Saunders teaches a memory to couple to the channel selection module and to store an indication of at least one overlapped legacy channel (Saunders, pars. 136, 138).

10. Claims 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okanoué and Saunders further in view of Banker et al (US 5485221A).

Regarding claim 28, Okanoué teaches selecting a first group of contiguous communications channels having a specified control channel (col. 5, lines 1-10, 40-60, show the selection of adjacent to include center channel), but is silent on a signed extension channel offset and a display to display information for communication.

Saunders teaches a transmission scheme wherein a numbered of channels are scanned on a burst containing a series of +/- ones frequencies (i.e., channels), which read on signed extension channels (pars. 32, 136).

Banker teaches displaying of virtual channel in a second contiguous portions (col. 19, lines 27-36).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Okanoué and Saunders, such that offset of numbered channels being integrated into the system to provide a mechanism for selecting a wider range on the frequency band and to provide information visualized during communication.

Regarding claim 29, the combination of Okanoué, Saunders and Banker disclose an energy conduit to couple to the group and selected from one of an omni directional antenna and a transceiver to couple to the energy conduit and to communicate

information using the first group (Saunders, pars 80-81, teach a master transceiver coupled to an omni directional antenna for transferring energy via channels).

Allowable Subject Matter

11. Claims 9, 14, 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

12. Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion


13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio R. Perez whose telephone number is (571) 272-7846. The examiner can normally be reached on 10:30 - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William G. Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Julio R Perez
Examiner
Art Unit 2617

7/5/07
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